FILE COPY
SURNAME:

Holderer
Walton

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. W. Weissenborn, Executive Officer
DMA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

In reply please refer to
DMA-163-[illegible] — Tungsten

Dear Mr. Weissenborn:

This will reply to your letter dated July 27, 1951, relative to the property of the Hopkins Mines, Inc., Powell County, Montana.

Their application was denied on June 18, 1951, due to the relative minor amounts of tungsten, which by their own estimates is insufficient to repay the loan.

Unless they can submit evidence the deposit contains sufficient tungsten to justify an exploration loan, we cannot reconsider the application.

Very truly yours,

George B. Holderer

George B. Holderer
Chief, Ferro Alloys Branch

TJBallard:awj

cc:File
Adm. Reading File
Reports & Records Unit
Mr. Holderer

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

340

a. E. e.

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DMA Field Team, Region II
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Spokane 4, Washington

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DMA-163[illegible] — Tungsten

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Mr. Holderer

FILE COPY
SURNAME:

Holden

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 18, 1951

Mr. John B. Hopkins, Vice President
Hopkins Mines, Inc.
314 Fuller Avenue
Helena, Montana

In reply please refer to:
DMA-1632-x

Dear Mr. Hopkins:

Your application for aid for an exploration project at Helmville, Montana is rejected. This is primarily a gold placer project and there is not sufficient evidence to show that it could be made to pay out for tungsten and monazite.

Very truly yours,

Tom Lyon

Tom Lyon
Director, Supply Division

Enclosures - 2 reports as requested.

GBHolderer:mem

cc - Adm. Reading File
Mr. Strobel
Mr. Holderer
Files

DMA 1632

858

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. Dma-1632X

Date received 6/5/51

Participation

Name and address of applicant

Spring Mines, Inc.
314 Fuller Avenue, Helena, Montana
or General Delivery, Helmville, Montana
or 800 4th Avenue West, Kalispell, Montana

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost

Mineral or metal Tungsten and Concrete Sand

Percentage of Government participation 75%

Location of mine Helmville, Montana
Powell County, Ogden Mountain Mining District

Date of filing MF-100 May 31, 1951

DMA Docket Number, if available unknown

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Hopkins Mines, Inc.
(Name of company)

By John B. Hopkins
(Signature of authorized official)

May 31, 1951
(Date)

Vice President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Answers to Questions on Form MF-103 (April 1951)

TITLE

Application For Aid For An Exploration Project Pursuant To Mineral Order 5, Under Defense Production Act of 1950.

THE APPLICANT

Questions:

1. Corporation - Hopkins Mines Inc.,314 Fuller Avenue, Helena, Montana (% C. E. Few).
and or General Delivery, Helmville, Montana
and or 830 4th Avenue West, Kalispell, Montana

2. None

3. Officers and stockholders:
Mr. Pat T. Phalen, president, 2109 West Pacific Avenue, Spokane, Washington (or General Delivery, Helmville, Montana)

Mr. John B. Hopkins, vice president, 830 4th Avenue West, Kalispell, Montana. Phone 1069L
OR 1039 NORTH WARREN, HELENA, MONTANA
Mr. Larry Walker, secretary-treasurer, 314 Fuller Avenue, Helena, Montana

Mrs. Pat T. Phalen, 2109 West Pacific Avenue, Spokane, Wash. (or General Delivery, Helmville, Montana)

Mr. C. E. Few, 314 Fuller Avenue, Helena, Montana

(five above mentioned people own all the stock)

4. Applicant and manager the same.
John B. Hopkins, Mining Engineer, 1932 graduate of Montana School of Mines. 19 years experience. Foreign service; U. S. Bureau of Mines, 1942 to 1945--general headquarters Helena, Montana, under E. L. Newman, District Engineer.

5. Owners

6. None

7. None

8. No operation at present time, hence no current profit or loss statement. Last operation 1941, no indebtedness.

9. We are able to invest a maximum of $10,000 as a corporation.

John B. Hopkins, 1039 N. Warren, Helena Montana

THE PROPERTY

Questions:

10.(a) 1180 acres of unpatented mining ground. No real property in the way of mining equipment.

(b) (See attached report) Repeat: Sec. 15 & 16, 21 & 22; T. 13-N; R. 10-W; Montana Mean Meridian--eight (8) associated placer claims on file, Powell County, Deer Lodge, Montana, Ogden Mountain mining district.

11. The Kilburn group; Gold Dust Twins; Kilburn-Rubens.

12. (See attached report)

13. (See attached report) Estimate: water for five to seven monts per year, for a 3000-yard operation per day. See attached power report by R.E.A., Helena, Montana, exhibit A

14. Five log cabins in fair shape, and miscellaneous small tools.

15. Ore would be in form of placer concentrates ready for use, 60 to 65% Ca WO_4, bagged at the mine for shipment, trucked to Drummond, Montana, then shipped via railroad--Northern Pacific or Chicago, Milwaukee & St. Paul to points east or west.
Placer washing equipment used as a mill on the property in the form of a dragline washing plant; "ie" Bodenson or Yuba placer equipment, with scheelite, monazite saving equipment incorporated.

16.(a) Approximately 300,000 cubic yards mined in former times for placer gold only; scheelite and monazite sand discarded. Gold operation suspended by Government Order L-2-03,1941.

(b) Production from this property would be similar to the H and H Mines, gold-scheelite dredge enterprise, Henderson Creek Placer, Drummond, Montana. Approximate production, 200,000 pounds Ca WO_4, grade 60%. Operation period 1942 to 1950. (See U. S. Bureau of Mines report on Henderson Creek Placers, bulletin No. _____).

(c) (See attached report by John B. Hopkins, 1951).

17. None

18.(a) (See attached report).

(b) (See attached report).

(c) Estimated Ca WO_4 reserves, grade 60%, 100,000 pounds ± Classification, probable ore. Monazite sand 50,000 pounds ±

John B. Hopkins, 1039 N. Warren, Helena Montana

19. The source area of this property consists of quartz vein deposits containing high grade scheelite. This source area is NOT proposed for a project at THIS TIME but will offer possibilities for further tungsten production by Hopkins Mines Inc., at a later date.

THE EXPLORATION

Questions:

20. Primarily, Scheelite Ca WO4; secondarily, Monazite sand.

21. Estimated time of proposed work--seven (7) months--June through December. Proposed work: bulldozing sample trenches and access roads, digging ten (10) placer shafts, drilling fifty (50) machine auger holes, professional assay work on samples, computations and report writing.

22. (See attached report, geology section).

THE REQUIREMENTS AND COSTS

23 (a)
Placer test pitting--ten pits

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	hoistman	13.00	13.00
2	miners	16.00	32.00
1	cook (camp)	10.00	10.00
6			$81.00

Time: to complete the digging and running all material through a sample-testing plant, to recover all "black sands" including the scheelite, monazite and placer gold equals three days per pit. Each pit 18 ft.to 24 ft. deep and 42 in. in diameter , using steel cassions for side support, small hoist and motor-driven pump.
3 days X $81.00 labor = $243.00 per pit
10 pits X $243.00 = $2430.00 labor costs

Placer test, auger holes--50 holes

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	machine auger operator	16.00	16.00
1	" " helper	12.00	12.00
1	cook (camp)	10.00	10.00
5			$64.00

Time: to complete the digging and running all material from the auger hole through a sample testing plant to recover all the "black sands" which includes all the scheelite, monazite and placer gold in the material, for further separation in an assay office located at Helena or Butte, Montana.
Time to complete such a test, exclusive of the assay office work, one day per hole (12 ft. to 22 ft. deep)
50 auger hole tests completely sampled equals 50 days
50 days X $64.00 = $3200.00 labor costs.

John B. Hopkins, 1039 N. Warren, Helena, Montana.

2 3 (a) continued

Placer test by bulldozer trenching--1000 ft.

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	bulldozer helper	12.00	12.00
1	cook (camp)	10.00	10.00
4			$ 48.00

Time: to completely dig and sample a bulldozer trench 8 ft. to 12 ft. deep in an 8 hr. shift is estimated to be a trench 50 ft. long (The area is timbered, and in places heavily timbered so that a helper will have to be added to assist the bulldozer operator in his work). Therefore the time element for 1000 ft. of bulldozer sample trenching will be 50 ft. per day.

Thus 50 ft. X 20 days - 1000 ft. of trench.

20 days X $48.00 = $800.00 labor costs.

The bulldozer trench samples will be spaces 20 ft. apart, and consist of 6" x 6" channel cuts made vertically in the exposed banks of the trench, so that a sam le will consist of 6" x 6" column of material from surface to bedrock, and 1 ft. below bedrock, thus having a 6" x 6" square, and 1 ft. deep of bedrock material added to the sample for each such column sample made.

Access Roads to Pit and Auger Holes:

Road made by use of a bulldozer so that a truck can be driven to hole location.

Bulldozer rental per hr. (T D 19 or equivalent) $15.00

Time: 100 hrs. = $1500.00 (this rate includes operator's wages, gas, oil, and all bulldozer supplies and repairs.

Summation 2 3 (a) labor		
Placer test pits	-- 10 holes	$2450.00
Auger holes	-- 50 "	3200.00
Bulldozer trench	-- 1000 ft.	800.00
Access roads to test pits	-- 100hrs	1500.00
Total labor (23 a)		$ 7950.00

23 (b)

Supervision

One mining engineer hired for an estimated 7 months' period (duration of project) salary and all expenses estimated at $600.00 per month.

7 months @ $600.00 = $4200.00

23 (c)

Cabin repairs and cleaning up in general - - - $200.00

23 (d)

None

John B. Hopkins 1039 N. Warren, Helena Montana

23 (e)
Sample bags - - - $60.00
Camp utensils - - 100.00
Total $ 160.00

23 (f)
One bulldozer with operator's wages, gas, oil and repairs for machine included equals $15.00 per hour
$15.00 X 20 days of 8 hrs. per day = $2400.00

Rental of shaft-sinking equipment which includes:
seven steel cassions 42" in diameter, 3 ft. long
small engine-driven hoist and hoist frame
small engine-driven water pump
placer washing test plant, engine driven, with tromel screen, sluice box, sample wilfly table, and extras
3 days per pit X 10 pits equals 30 days
30 days X $35.00 per day rental = $1050.00

Rental of one truck-mounted auger drill capable of digging a 14" to 16" diameter hole 30 ft. deep.
Time: 24 days @ $40.00 rental per day = $960.00
(this includes 4 days moving in and out time from Idaho Falls, Idaho).

Truck rental : one ½ton pickup for service to bulldozer and test pits, use in service to camp, and hauling samples to assay office Helena or Butte, Montana.
Time: 6 months @ $150.00 per month = $900.00

Summation 23 (f)

Bulldozer rental - - - - - - - - -	$2400.00
Shaft equipment rental - - - - - -	1050.00
Auger drill and equipment rental - - -	960.00
Access roads (bulldozer, as above) - - -	1500.00
Pickup truck rental - - - - - - -	900.00
	$6810.00

23 (g)
None

23 (h)
Engineering equipment, paper, notebooks, etc. $45.00

23 (i)
Professional assay office service to separate the scheelite and monazite minerals from the sample concentrates taken on the project:
140 samples @ $5.00 each = $700.00

24
The time schedule for this project calls for seven months for completion, starting in June, through November, and one additional month for calculation and report.

John B. Hopkins, 1039 N. Warren Helena Montana

GENERAL INFORMATION

Accompanying the enclosed government forms MF-100 and MF-103, are the following: one engineer's report, one power report (exhibit A), and one hardrock sample of scheelite (calcium tungstate), (exhibit B). The engineer's report as written was for the purpose of interesting a dredging company in the production of placer gold, placer tungsten and monazite sand--the tungsten and monazite being by-products. This report is being submitted as it was written, which gives the basic economic value as gold value. Due to a fixed price of gold, and rising production costs, this property will not be worked for gold alone, and if not worked the tungsten values contained will not be made available for the present tungsten shortage.

While placer testing last year it was discovered that the scheelite and monazite values were badly powdered and slimed in placer churn drill holes; therefore a correct evaluation of the tungsten content was not obtained. Thus, no data is available as to just what the economics of the tungsten and monazite minerals will play in the financial success of this venture. The "blank sands" concentrates from the churn drill testing gave evidence of the concentration of scheelite and monazite sands, but only on a qualatative basis. Should we be able to obtain government aid to start a tungsten-monazite operation, the gold values as indicated will not hurt the economics of our proposed project. Our company does not intend to enter an operation on a gold basis, and we do not feel we should enter into the evaluation of the deposit on the scheelite and monazite basis without an assurance of some government aid. The scheelite and monazite content of this placer ground will be a major contribution to the defense effort. To make this contribution it will be necessary for us to have additional financing.

The scheelite hardrock sample is sent along as a visual example of the type of ore which exists in the source area of the scheelite placer. This sample has no bearing on the present proposed venture, other than the reason listed above. If you wish, I will send a sample of the placer scheelite as recovered from our gold placer work.

The tungsten sands, as the engineer's report states, are found in a commercial amount in the three upper tributaries of Wilson Creek in the "upper" basin area. The farther up these streams the more prevalent the scheelite and monazite sands become.

We believe that government aid herein proposed will substantially test the upper tributaries of Wilson Creek to such a degree that on the basis of the project findings an economically sound placer operation can be planned. The estimated yardage that will be tested in this proposed project will be approximately 2,700,000 cubic yards of tungsten bearing stream gravel. This figure is itemized in the accompanying engineer's report (page 14) listed as the "Basin Flat", with an estimated gold value of 35¢ per cubic yard.

At your convenience, please return the engineer's report, the large power application report, and the tungsten sample to John B. Hopkins, 1039 North Warren, Helena, Montana.

John B. Hopkins 1039 N. Warren Helena, Montana

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary

Palmarhed May 31-1957

O.E.C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON, D. C.

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1632-X Hopkins Mines

Commodity Tungsten

Applicant Hopkins Mines, Inc.
314 Fuller Ave, Helena, Mont.

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Denial

Docket No. 1632-X

Commodity Tungsten

Total Amount Not shown Probably $20000?

Govt. Participation $15000

1. Name and Address of Applicant Hoffman Mines, Inc. 314 Fuller Ave, Helena, Mont.

2. Location of Property Helmville, Montana.

3. Mineral or metal Tungsten Is it listed in Section 9 of MO-5?

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good_____

b) Poor ✓

c) None_____

d) Don't know—needs field examination_____

e) Is there an alternative and favorable project?_____ (If so, attach an explanation)

5. Is the applicant's right to the property clearly stated?_____ (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?_____

Does the lease have sufficient time to run to cover a future productive period?_____

*question numbers are those of MF-103

14. Exhibit E (question 23-c)*

a) Is it applicable?

b) Sufficient data?

c) Reasonable?

d) Field check needed?

15. In your judgment, can the proposed work be done in the proposed time?

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Application rejected on basis of relative unimportance of tungsten content of placer. This is primarily a gold placer and there is not sufficient evidence of tungsten or monazite to justify proceeding for those two minerals. Bourset owners on the monazite.

Reviewed by Geo B Holden
DM Lemon for GBH.

Date 6/26/51

97692

Index - DMA 1632-X
Zungetta.
Denial - Transmitted to Strabel.

" 3- applications 1177-103

Defense Minerals Administration
Reference Slip

Date 6/11

To: 1. Bradley

2.

3.

4.

DMA 1632X

For Action ✓
Reply
Information
Remarks:

Sender LANDON F. STROBEL

3
Mr. Strobel DMA 1632X

Forwarded to

Branch

Date

Sender

2
Mr. Strobel DMA 1632X

Forwarded to

Branch

Date

Sender

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA-1632X

Date received 6/5/51

Participation

Hopkins Mines, Inc.
314 Fuller Avenue, Helena, Montana
or General Delivery, Helmville, Montana
or 830 4th Avenue West, Kalispell, Montana

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost

Mineral or metal Tungsten and Monazite Sand

Percentage of Government participation 75%

Location of mine Helmville, Montana
Powell County, Ogden Mountain Mining District

Date of filing MF-100 May 31, 1951

DMA Docket Number, if available unknown

INSTRUCTIONS

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THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
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*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
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NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

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16—64067-1

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State amount of power to be used, rate per hour or other cost, and source.

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15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Hopkins Mines, Inc.
(Name of company)

By John B. Hopkins
(Signature of authorized official)

May 31, 1951
(Date)

Vice President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

John B. Hopkins, 1039 N. Warren, Helena, Montana.

Answers to Questions on Form MF-103 (April 1951)

TITLE

Application For Aid For An Exploration Project Pursuant To Mineral Order 5, Under Defense Production Act of 1950.

THE APPLICANT

Questions:

1. Corporation - Hopkins Mines Inc.,314 Fuller Avenue, Helena, Montana (% C. E. Pew).
   and or General Delivery, Helmville, Montana
   and or 830 4th Avenue West, Kalispell, Montana

2. None

3. Officers and stockholders:
   Mr. Pat T. Phalen, president, 2109 West Pacific Avenue, Spokane, Washington (or General Delivery, Helmville, Montana)

   Mr. John B. Hopkins, vice president, 830 4th Avenue West, Kalispell, Montana. Phone 1069L
   1039 NORTH WARREN, HELENA, MONTANA
   Mr. Larry Walker, secretary-treasurer, 314 Fuller Avenue, Helena, Montana

   Mrs. Pat T. Phalen, 2109 West Pacific Avenue, Spokane, Wash. (or General Delivery, Helmville, Montana)

   Mr. C. E. Pew, 314 Fuller Avenue, Helena, Montana

   (five above mentioned people own all the stock)

4. Applicant and manager the same.
   John B. Hopkins, Mining Engineer, 1932 graduate of Montana School of Mines. 19 years experience. Foreign service; U. S. Bureau of Mines, 1942 to 1945--general headquarters Helena, Montana, under E. W. Newman, District Engineer.

5. Owners

6. None

7. None

8. No operation at present time, hence no current profit or loss statement. Last operation 1941, no indebtedness.

9. We are able to invest a maximum of $10,000 as a corporation.

John B. Hopkins 1039 N. Warren, Helena Montana

THE PROPERTY

Questions:

10.(a) 1180 acres of unpatented mining ground. No real property in the way of mining equipment.

(b) (See attached report) Repeat: Sec. 15 & 16, 21 & 22; T. 13-N; R. 10-W; Montana Mean Meridian--eight (8) associated placer claims on file, Powell County, Deer Lodge, Montana, Ogden Mountain mining district.

11. The Kilburn group; Gold Dust Twins; Kilburn-Rubens.

12. (See attached report)

13. (See attached report) Estimate: water for five to seven months per year, for a 3000-yard operation per day. See attached power report by R.E.A.,Helena, Montana,exhibit A

14. Five log cabins in fair shape, and miscellaneous small tools.

15. Ore would be in form of placer concentrates ready for use, 60 to 65% Ca WO_4, bagged at the mine for shipment, trucked to Drummond, Montana, then shipped via railroad--Northern Pacific or Chicago, Milwaukee & St. Paul to points east or west.
Placer washing equipment used as a mill on the property in the form of a dragline washing plant; "ie" Bodenson or Yuba placer equipment, with scheelite, monazite saving equipment incorporated.

16.(a) Approximately 300,000 cubic yards mined in former times for placer gold only; scheelite and monazite sand discarded. Gold operation suspended by Government Order L-2-08,1941.

(b) Production from this property would be similar to the H and H Mines, gold-scheelite dredge enterprise, Henderson Creek Placer, Drummond, Montana. Approximate production, 200,000 pounds Ca WO_4, grade 60%. Operation period 1942 to 1950. (See U. S. Bureau of Mines report on Henderson Creek Placers, bulletin No. _____).

(c) (See attached report by John B. Hopkins, 1951).

17. None

18.(a) (See attached report).

(b) (See attached report).

(c) Estimated Ca WO_4 reserves, grade 60%, 100,000 pounds ±
Classification, probable ore. Monazite sand 50,000 pounds ±

John B. Hopkins, 1031 N. Ubrary, Helena Montana

19. The source area of this property consists of quartz vein deposits containing high grade scheelite. This source area is NOT proposed for a project at THIS TIME but will offer possibilities for further tungsten production by Hopkins Mines Inc., at a later date.

THE EXPLORATION

Questions:

20. Primarily, Scheelite Ca WO_4; secondarily, Monazite sand.

21. Estimated time of proposed work--seven (7) months--June through December. Proposed work: bulldozing sample trenches and access roads, digging ten (10) placer shafts, drilling fifty (50) machine auger holes, professional assay work on samples, computations and report writing.

22. (See attached report, geology section).

THE REQUIREMENTS AND COSTS

23 (a)

Placer test pitting--ten pits

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	hoistman	13.00	13.00
2	miners	16.00	32.00
1	cook (camp)	10.00	10.00
6			$81.00

Time: to complete the digging and running all material through a sample-testing plant, to recover all "black sands" including the scheelite, monazite and placer gold equals three days per pit. Each pit 18 ft.to 24 ft. deep and 42 in. in diameter , using steel cassions for side support, small hoist and motor-driven pump.
3 days X $81.00 labor = $243.00 per pit
10 pits X $243.00 = $2430.00 labor costs

Placer test, auger holes--50 holes

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	machine auger operator	16.00	16.00
1	" " helper	12.00	12.00
1	cook (camp)	10.00	10.00
5			$64.00

Time: to complete the digging and running all material from the auger hole through a sample testing plant to recover all the "black sands" which includes all the scheelite, monazite and placer gold in the material, for further separation in an assay office located at Helena or Butte, Montana.
Time to complete such a test, exclusive of the assay office work, one day per hole (12 ft. to 22 ft. deep)
50 auger hole tests completely sampled equals 50 days
50 days X $64.00 = $3200.00 labor costs.

John B. Hopkins, 1039 N. Warren, Helena Montana

2 3 (a) continued
Placer test by bulldozer trenching--1000 ft.

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	bulldozer helper	12.00	12.00
1	cook (camp)	10.00	10.00
4			$ 48.00

Time: to completely dig and sample a bulldozer trench 8 ft. to 12 ft. deep in an 8 hr. shift is estimated to be a trench 50 ft. long (The area is timbered, and in places heavily timbered so that a helper will have to be added to assist the bulldozer operator in his work). Therefore the time element for 1000 ft. of bulldozer sample trenching will be 50 ft. per day.
Thus 50 ft. X 20 days - 1000 ft. of trench.
20 days X $48.00 = $800.00 labor costs.
The bulldozer trench samples will be spaces 20 ft. apart, and consist of 6" x 6" channel cuts made vertically in the exposed banks of the trench, so that a sample will consist of 6" x 6" column of material from surface to bedrock, and 1 ft. below bedrock, thus having a 6" x 6" square, and 1 ft. deep of bedrock material added to the sample for each such column sample made.

Access Roads to Pit and Auger Holes:
Road made by use of a bulldozer so that a truck can be driven to hole location.
Bulldozer rental per hr. (T D 19 or equivalent) $15.00
Time: 100 hrs. = $1500.00 (this rate includes operator's wages, gas, oil, and all bulldozer supplies and repairs.

Summation 2 3 (a) labor		
Placer test pits	-- 10 holes	$2430.00
Auger holes	-- 50 "	3200.00
Bulldozer trench	-- 1000 ft.	800.00
Access roads to test pits	-- 100hrs	1500.00
Total labor (23 a)		$ 7930.00

23 (b)
Supervision
One mining engineer hired for an estimated 7 months' period (duration of project) salary and all expenses estimated at $600.00 per month.
7 months @ $600.00 = $4200.00

23 (c)
Cabin repairs and cleaning up in general - - - $200.00

23 (d)
None

John B. Warren, 1039 N. Warren, Helena, Montana

23 (e)

Sample bags - - -	$60.00
Camp utensils - -	100.00
Total	$ 160.00

23 (f)
One bulldozer with operator's wages, gas, oil and repairs for machine included equals $15.00 per hour
$15.00 X 20 days of 8 hrs. per day = $2400.00

Rental of shaft-sinking equipment which includes:
seven steel cassions 42" in diameter, 3 ft. long
small engine-driven hoist and hoist frame
small engine-driven water pump
placer washing test plant, engine driven, with tromel screen, sluice box, sample wilfly table, and extras
3 days per pit X 10 pits equals 30 days
30 days X $35.00 per day rental = $1050.00

Rental of one truck-mounted auger drill capable of digging a 14" to 16" diameter hole 30 ft. deep.
Time: 24 days @ $40.00 rental per day = $960.00
(this includes 4 days moving in and out time from Idaho Falls, Idaho).

Truck rental : one ½ton pickup for service to bulldozer and test pits, use in service to camp, and hauling samples to assay office Helena or Butte, Montana.
Time: 6 months @ $150.00 per month = $900.00

Summation 23 (f)

Bulldozer rental - - - - - - - - -	$2400.00
Shaft equipment rental - - - - - -	1050.00
Auger drill and equipment rental - - -	960.00
Access roads (bulldozer, as above) - - -	1500.00
Pickup truck rental - - - - - -	900.00
	$6810.00

23 (g)
None

23 (h)
Engineering equipment, paper, notebooks, etc. $45.00

23 (i)
Professional assay office service to separate the scheelite and monazite minerals from the sample concentrates taken on the project:
140 samples @ $5.00 each = $700.00

24
The time schedule for this project calls for seven months for completion, starting in June, through November, and one additional month for calculation and report.

John B. Hopkins, 1039 N. Warren, Helena, Montana

GENERAL INFORMATION

Accompanying the enclosed government forms MF-100 and MF-103, are the following: one engineer's report, one power report (exhibit A), and one hardrock sample of scheelite (calcium tungstate), (exhibit B). The engineer's report as written was for the purpose of interesting a dredging company in the production of placer gold, placer tungsten and monazite sand--the tungsten and monazite being by-products. This report is being submitted as it was written, which gives the basic economic value as gold value. Due to a fixed price of gold, and rising production costs, this property will not be worked for gold alone, and if not worked the tungsten values contained will not be made available for the present tungsten shortage.

While placer testing last year it was discovered that the scheelite and monazite values were badly powdered and slimed in placer churn drill holes; therefore a correct evaluation of the tungsten content was not obtained. Thus, no data is available as to just what the economics of the tungsten and monazite minerals will play in the financial success of this venture. The "blank sands" concentrates from the churn drill testing gave evidence of the concentration of scheelite and monazite sands, but only on a qualatative basis. Should we be able to obtain government aid to start a tungsten-monazite operation, the gold values as indicated will not hurt the economics of our proposed project. Our company does not intend to enter an operation on a gold basis, and we do not feel we should enter into the evaluation of the deposit on the scheelite and monazite basis without an assurance of some government aid. The scheelite and monazite content of this placer ground will be a major contribution to the defense effort. To make this contribution it will be necessary for us to have additional financing.

The scheelite hardrock sample is sent along as a visual example of the type of ore which exists in the source area of the scheelite placer. This sample has no bearing on the present proposed venture, other than the reason listed above. If you wish, I will send a sample of the placer scheelite as recovered from our gold placer work.

The tungsten sands, as the engineer's report states, are found in a commercial amount in the three upper tributaries of Wilson Creek in the "upper" basin area. The farther up these streams the more prevalent the scheelite and monazite sands become.

We believe that government aid herein proposed will substantially test the upper tributaries of Wilson Creek to such a degree that on the basis of the project findings an economically sound placer operation can be planned. The estimated yardage that will be tested in this proposed project will be approximately 2,700,000 cubic yards of tungsten bearing stream gravel. This figure is itemized in the accompanying engineer's report (page 14) listed as the "Basin Flat", with an estimated gold value of 35¢ per cubic yard.

At your convenience, please return the engineer's report, the large power application report, and the tungsten sample to John B. Hopkins, 1039 North Warren, Helena, Montana.

DEPARTMENT OF THE INTERIOR
JUN 5 - 1951
LAMDON F. SPROBEL
Executive Secretary

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. Dma-1632X

Date received 6/5/51

Participation

Hopkins Mines, Inc.
314 Fuller Avenue, Helena, Montana
or General Delivery, Helmville, Montana
or 830 4th Avenue West, Kalispell, Montana

Name and address of applicant

May 31, 1951
Date

FILL IN THIS BLOCK

Date of application: May 28, 1951

Estimated cost: 20,045

Mineral or metal: Tungsten and Monazite Sand

Percentage of Government participation: 75%

Location of mine: Helmville, Montana
Powell County, Ogden Mountain Mining District

Date of filing MF-100: May 31, 1951

DMA Docket Number, if available: unknown

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

sh current financial statement, showing assets and liabilities, and a profit and loss statement.

uch money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the as detailed in question 23 of this application form, in accordance with the regulations on Government participation 9 of Mineral Order 5)?

already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
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    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
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(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
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19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
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    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Hopkins Mines, Inc.
(Name of company)

By John B. Hopkins
(Signature of authorized official)

May 31, 1951
(Date)

Vice President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

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16—64067-1 U. S. GOVERNMENT PRINTING

Answers to Questions on Form MF-103 (April 1951)

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   Mr. John B. Hopkins, vice president, 830 4th Avenue West, Kalispell, Montana. Phone 1069L
   OR 1039 NORTH WARREN, HELENA, MONTANA

   Mr. Larry Walker, secretary-treasurer, 314 Fuller Avenue, Helena, Montana

   Mrs. Pat T. Phalen, 2109 West Pacific Avenue, Spokane, Wash. (or General Delivery, Helmville, Montana)

   Mr. C. E. Pew, 314 Fuller Avenue, Helena, Montana

   (five above mentioned people own all the stock)

4. Applicant and manager the same.
   John B. Hopkins, Mining Engineer, 1932 graduate of Montana School of Mines. 19 years experience. Foreign service; U. S. Bureau of Mines, 1942 to 1945--general headquarters Helena, Montana, under E. W. Newman, District Engineer.

5. Owners

6. None

7. None

8. No operation at present time, hence no current profit or loss statement. Last operation 1941, no indebtedness.

9. We are able to invest a maximum of $10,000 as a corporation.

John B. Hopkins 1039 N. Warren, Helena Montana

THE PROPERTY

Questions:

10.(a) 1180 acres of unpatented mining ground. No real property in the way of mining equipment.

(b) (See attached report) Repeat: Sec. 15 & 16, 21 & 22; T. 13-N; R. 10-W; Montana Mean Meridian--eight (8) associated placer claims on file, Powell County, Deer Lodge, Montana, Ogden Mountain mining district.

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13. (See attached report) Estimate: water for five to seven months per year, for a 3000-yard operation per day. See attached power report by R.E.A., Helena, Montana, exhibit A

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Placer washing equipment used as a mill on the property in the form of a dragline washing plant; "ie" Bodenson or Yuba placer equipment, with scheelite, monazite saving equipment incorporated.

16.(a) Approximately 300,000 cubic yards mined in former times for placer gold only; scheelite and monazite sand discarded. Gold operation suspended by Government Order L-2-08, 1941.

(b) Production from this property would be similar to the H and H Mines, gold-scheelite dredge enterprise, Henderson Creek Placer, Drummond, Montana. Approximate production, 200,000 pounds Ca WO_4, grade 60%. Operation period 1942 to 1950. (See U. S. Bureau of Mines report on Henderson Creek Placers, bulletin No. _____).

(c) (See attached report by John B. Hopkins, 1951).

17. None

18.(a) (See attached report).

(b) (See attached report).

(c) Estimated Ca WO_4 reserves, grade 60%, 100,000 pounds ±
Classification, probable ore. Monazite sand 50,000 pounds ±

John B. Hopkins, 1039 N. Warren, Helena Montana

19. The source area of this property consists of quartz vein deposits containing high grade scheelite. This source area is NOT proposed for a project at THIS TIME but will offer possibilities for further tungsten production by Hopkins Mines Inc., at a later date.

THE EXPLORATION

Questions:

20. Primarily, Scheelite Ca WO_4; secondarily, Monazite sand.

21. Estimated time of proposed work--seven (7) months--June through December. Proposed work: bulldozing sample trenches and access roads, digging ten (10) placer shafts, drilling fifty (50) machine auger holes, professional assay work on samples, computations and report writing.

22. (See attached report, geology section).

THE REQUIREMENTS AND COSTS

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3 days X $81.00 labor = $243.00 per pit

10 pits X $243.00 = $2430.00 labor costs

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1	machine auger operator	16.00	16.00
1	" " helper	12.00	12.00
1	cook (camp)	10.00	10.00
5			$64.00

Time: to complete the digging and running all material from the auger hole through a sample testing plant to recover all the "black sands" which includes all the scheelite, monazite and placer gold in the material, for further separation in an assay office located at Helena or Butte, Montana.

Time to complete such a test, exclusive of the assay office work, one day per hole (12 ft. to 22 ft. deep)

50 auger hole tests completely sampled equals 50 days

50 days X $64.00 = $3200.00 labor costs.

John B. Hopkins, 1039 N. Warren, Helena Montana

2 3 (a) continued
Placer test by bulldozer trenching--1000 ft.

No.	Men	Rate per 8hr.shift	Total
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1	sample helper	12.00	12.00
1	bulldozer helper	12.00	12.00
1	cook (camp)	10.00	10.00
4			$ 48.00

Time: to completely dig and sample a bulldozer trench 8 ft. to 12 ft. deep in an 8 hr. shift is estimated to be a trench 50 ft. long (The area is timbered, and in places heavily timbered so that a helper will have to be added to assist the bulldozer operator in his work). Therefore the time element for 1000 ft. of bulldozer sample trenching will be 50 ft. per day.
Thus 50 ft. X 20 days - 1000 ft. of trench.
20 days X $48.00 - $800.00 labor costs.
The bulldozer trench samples will be spaces 20 ft. apart, and consist of 6" x 6" channel cuts made vertically in the exposed banks of the trench, so that a sample will consist of 6" x 6" column of material from surface to bedrock, and 1 ft. below bedrock, thus having a 6" x 6" square, and 1 ft. deep of bedrock material added to the sample for each such column sample made.

Access Roads to Pit and Auger Holes:
Road made by use of a bulldozer so that a truck can be driven to hole location.
Bulldozer rental per hr. (T D 19 or equivalent) $15.00
Time: 100 hrs. - $1500.00 (this rate includes operator's wages, gas, oil, and all bulldozer supplies and repairs.

Summation 2 3 (a) labor		
Placer test pits	-- 10 holes	$2430.00
Auger holes	-- 50 "	3200.00
Bulldozer trench	-- 1000 ft.	800.00
Access roads to test pits	-- 100hrs	1500.00
Total labor (23 a)		$ 7930.00

23 (b)
Supervision
One mining engineer hired for an estimated 7 months' period (duration of project) salary and all expenses estimated at $600.00 per month.
7 months @ $600.00 - $4200.00

23 (c)
Cabin repairs and cleaning up in general - - - $200.00

23 (d)
None

John B. Hopkins, 1039 N. Warren Helena Montana

23 (e)

Sample bags - - -	$60.00
Camp utensils - -	100.00
Total	$ 160.00

23 (f)
One bulldozer with operator's wages, gas, oil and repairs for machine included equals $15.00 per hour
$15.00 X 20 days of 8 hrs. per day = $2400.00

Rental of shaft-sinking equipment which includes:
seven steel cassions 42" in diameter, 3 ft. long
small engine-driven hoist and hoist frame
small engine-driven water pump
placer washing test plant, engine driven, with tromel screen, sluice box, sample wilfly table, and extras
3 days per pit X 10 pits equals 30 days
30 days X $35.00 per day rental = $1050.00

Rental of one truck-mounted auger drill capable of digging a 14" to 16" diameter hole 30 ft. deep.
Time: 24 days @ $40.00 rental per day = $960.00
(this includes 4 days moving in and out time from Idaho Falls, Idaho).

Truck rental : one ½ton pickup for service to bulldozer and test pits, use in service to camp, and hauling samples to assay office Helena or Butte, Montana.
Time: 6 months @ $150.00 per month = $900.00

Summation 23 (f)

Bulldozer rental - - - - - - - -	$2400.00
Shaft equipment rental - - - - - -	1050.00
Auger drill and equipment rental - - -	960.00
Access roads (bulldozer, as above) - - -	1500.00
Pickup truck rental - - - - - -	900.00
	$6810.00

23 (g)
None

23 (h)
Engineering equipment, paper, notebooks, etc. $45.00

23 (i)
Professional assay office service to separate the scheelite and monazite minerals from the sample concentrates taken on the project:
140 samples @ $5.00 each = $700.00

24
The time schedule for this project calls for seven months for completion, starting in June, through November, and one additional month for calculation and report.

John B. Hopkins 1039 N. Warren Helena Montana

GENERAL INFORMATION

Accompanying the enclosed government forms MF-100 and MF-103, are the following: one engineer's report, one power report (exhibit A), and one hardrock sample of scheelite (calcium tungstate), (exhibit B). The engineer's report as written was for the purpose of interesting a dredging company in the production of placer gold, placer tungsten and monazite sand--the tungsten and monazite being by-products. This report is being submitted as it was written, which gives the basic economic value as gold value. Due to a fixed price of gold, and rising production costs, this property will not be worked for gold alone, and if not worked the tungsten values contained will not be made available for the present tungsten shortage.

While placer testing last year it was discovered that the scheelite and monazite values were badly powdered and slimed in placer churn drill holes; therefore a correct evaluation of the tungsten content was not obtained. Thus, no data is available as to just what the economics of the tungsten and monazite minerals will play in the financial success of this venture. The "blank sands" concentrates from the churn drill testing gave evidence of the concentration of scheelite and monazite sands, but only on a qualatative basis. Should we be able to obtain government aid to start a tungsten-monazite operation, the gold values as indicated will not hurt the economics of our proposed project. Our company does not intend to enter an operation on a gold basis, and we do not feel we should enter into the evaluation of the deposit on the scheelite and monazite basis without an assurance of some government aid. The scheelite and monazite content of this placer ground will be a major contribution to the defense effort. To make this contribution it will be necessary for us to have additional financing.

The scheelite hardrock sample is sent along as a visual example of the type of ore which exists in the source area of the scheelite placer. This sample has no bearing on the present proposed venture, other than the reason listed above. If you wish, I will send a sample of the placer scheelite as recovered from our gold placer work.

The tungsten sands, as the engineer's report states, are found in a commercial amount in the three upper tributaries of Wilson Creek in the "upper" basin area. The farther up these streams the more prevalent the scheelite and monazite sands become.

We believe that government aid herein proposed will substantially test the upper tributaries of Wilson Creek to such a degree that on the basis of the project findings an economically sound placer operation can be planned. The estimated yardage that will be tested in this proposed project will be approximately 2,700,000 cubic yards of tungsten bearing stream gravel. This figure is itemized in the accompanying engineer's report (page 14) listed as the "Basin Flat", with an estimated gold value of 35¢ per cubic yard.

At your convenience, please return the engineer's report, the large power application report, and the tungsten sample to John B. Hopkins, 1039 North Warren, Helena, Montana.

John B. Hopkins, 1039 N. Warren Helena Montana

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Received
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary

Postmarked May 31 - 1951

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. Dma-1632X

Date received 6/5/51

Participation

Hopkins Mines, Inc.
314 Fuller Avenue, Helena, Montana
or General Delivery, Helmville, Montana
or 830 4th Avenue West, Kalispell, Montana

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost

Mineral or metal Tungsten and Monazite Sand

Percentage of Government participation 75%

Location of mine Helmville, Montana
Powell County, Ogden Mountain Mining District

Date of filing MF-100 May 31, 1951

DMA Docket Number, if available unknown

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Hopkins Mines, Inc.
(Name of company)

By John B. Hopkins
(Signature of authorized official)

May 31, 1951
(Date)

Vice President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Answers to Questions on Form MF-103 (April 1951)

TITLE

Application For Aid For An Exploration Project Pursuant To Mineral Order 5, Under Defense Production Act of 1950.

THE APPLICANT

Questions:

1. Corporation - Hopkins Mines Inc., 314 Fuller Avenue, Helena, Montana (% C. E. Few).
and or General Delivery, Helmville, Montana
and or 830 4th Avenue West, Kalispell, Montana

2. None

3. Officers and stockholders:
Mr. Pat T. Whalen, president, 2109 West Pacific Avenue, Spokane, Washington (or General Delivery, Helmville, Montana)

Mr. John B. Hopkins, vice president, 830 4th Avenue West, Kalispell, Montana. Phone 1069L
OR 1039 NORTH WARREN, HELENA, MONTANA

Mr. Larry Walker, secretary-treasurer, 314 Fuller Avenue, Helena, Montana

Mrs. Pat T. Whalen, 2109 West Pacific Avenue, Spokane, Wash. (or General Delivery, Helmville, Montana)

Mr. C. E. Few, 314 Fuller Avenue, Helena, Montana

(five above mentioned people own all the stock)

4. Applicant and manager the same.
John B. Hopkins, Mining Engineer, 1938 graduate of Montana School of Mines. 19 years experience. Foreign service; U. S. Bureau of Mines, 1942 to 1945--general headquarters Helena, Montana, under A. W. Bowen, District Engineer.

5. Owners

6. None

7. None

8. No operation at present time, hence no current profit or loss statement. Last operation 1941, no indebtedness.

9. We are able to invest a maximum of $10,000 as a corporation.

THE PROPERTY

Questions:

10.(a) 1180 acres of unpatented mining ground. No real property in the way of mining equipment.

(b) (See attached report) Repeat: Sec. 15 & 16, 21 & 22; T. 13-N; R. 10-W.; Montana Main Meridian--eight (8) associated placer claims on file, Powell County, Deer Lodge, Montana, Ogden Mountain Mining district.

11. The Kilburn group; Gold Dust Twins; Kilburn-Rubens.

12. (See attached report)

13. (See attached report) Estimate: water for five to seven months per year, for a 3000-yard operation per day. See attached power report by R.E.A., Helena, Montana, exhibit A

14. Five log cabins in fair shape, and miscellaneous small tools.

15. Ore would be in form of placer concentrates ready for use, 60 to 65% $CaWO_4$, bagged at the mine for shipment, trucked to Drummond, Montana, then shipped via railroad--Northern Pacific or Chicago, Milwaukee & St. Paul to points east or west.
Placer washing equipment used as a mill on the property in the form of a dragline washing plant; "Sic" Bodenson or Yuba placer equipment, with scheelite, monazite saving equipment incorporated.

16.(a) Approximately 300,000 cubic yards mined in former times for placer gold only; scheelite and monazite sand discarded. Gold operation suspended by Government Order L-208,1941.

(b) Production from this property would be similar to the H and H Mines, gold-scheelite dredge enterprise, Henderson Creek Placer, Drummond, Montana. Approximate production, 200,000 pounds $CaWO_4$, grade 60%. Operation period 1942 to 1950. (See U. S. Bureau of Mines report on Henderson Creek Placers, bulletin No. _____).

(c) (See attached report by John B. Hopkins, 1951).

17. None

18.(a) (See attached report).

(b) (See attached report).

(c) Estimated $CaWO_4$ reserves, grade 60%, 100,000 pounds ±
Classification, probable ore. Monazite sand 50,000 pounds ±

19. The source area of this property consists of quartz vein deposits containing high grade scheelite. This source area is NOT proposed for a project at THIS TIME but will offer possibilities for further tungsten production by Hopkins Mines Inc., at a later date.

THE EXPLORATION

Questions:

20. Primarily, Scheelite Ca WO_4; secondarily, Monazite sand.

21. Estimated time of proposed work--seven (7) months--June through December. Proposed work: bulldozing sample trenches and access roads, digging ten (10) placer shafts, drilling fifty (50) machine auger holes, professional assay work on samples, computations and report writing.

22. (See attached report, geology section).

THE REQUIREMENTS AND COSTS

23 (a)

Placer test pitting--ten pits

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	hoistman	13.00	13.00
2	miners	16.00	32.00
1	cook (camp)	10.00	10.00
6			$81.00

Time: to complete the digging and running all material through a sample-testing plant, to recover all "black sands" including the scheelite, monazite and placer gold equals three days per pit. Each pit 18 ft. to 24 ft. deep and 42 in. in diameter, using steel cassions for side support, small hoist and motor-driven pump.
3 days X $81.00 labor = $243.00 per pit
10 pits X $243.00 = $2430.00 labor costs

Placer test, auger holes--50 holes

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	machine auger operator	16.00	16.00
1	" " helper	12.00	12.00
1	cook (camp)	10.00	10.00
5			$64.00

Time: to complete the digging and running all material from the auger hole through a sample testing plant to recover all the "black sands" which includes all the scheelite, monazite and placer gold in the material, for further separation in an assay office located at Helena or Butte, Montana.
Time to complete such a test, exclusive of the assay office work, one day per hole (12 ft. to 22 ft. deep)
50 auger hole tests completely sampled equals 50 days
50 days X $64.00 = $3200.00 labor costs.

2 3 (a) continued

Placer test by bulldozer trenching--1000 ft.

No.	Men	Rate per 8hr.shift	Total
1	sampler	$14.00	$14.00
1	sample helper	12.00	12.00
1	bulldozer helper	12.00	12.00
1	cook (comp)	10.00	10.00
4			$ 48.00

Time: to completely dig and sample a bulldozer trench 8 ft. to 12 ft. deep in an 8 hr. shift is estimated to be a trench 50 ft. long (The area is timbered, and in places heavily timbered so that a helper will have to be added to assist the bulldozer operator in his work). Therefore the time element for 1000 ft. of bulldozer sample trenching will be 50 ft. per day.

Thus 50 ft. X 20 days = 1000 ft. of trench.

20 days X $48.00 = $960.00 labor costs.

The bulldozer trench samples will be spaces 20 ft. apart, and consist of 6" x 6" channel cuts made vertically in the exposed banks of the trench, so that a sample will consist of 6" x 6" column of material from surface to bedrock, and 1 ft. below bedrock, thus having a 6" x 6" square, and 1 ft. deep of bedrock material added to the sample for each such column sample made.

Access Roads to Pit and Auger Holes:

Road made by use of a bulldozer so that a truck can be driven to hole location.

Bulldozer rental per hr. (T D 19 or equivalent) $15.00

Time: 100 hrs. = $1500.00 (this rate includes operator's wages, gas, oil, and all bulldozer supplies and repairs.

Summation 2 3 (a) labor		
Placer test pits	-- 10 holes	$2430.00
Auger holes	-- 50 "	3200.00
Bulldozer trench	-- 1000 ft.	800.00
Access roads to test pits	-- 100hrs	1500.00
Total labor (23 a)		$ 7930.00

23 (b)

Supervision

One mining engineer hired for an estimated 7 months' period (duration of project) salary and all expenses estimated at $600.00 per month.

7 months @ $600.00 = $4200.00

23 (c)

Cabin repairs and cleaning up in general - - - $300.00

23 (d)

None

23 (e)
Sample bags - - - $60.00
Camp utensils - - 100.00
Total $ 160.00

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One bulldozer with operator's wages, gas, oil and repairs for machine included equals $15.00 per hour
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seven steel cassions 42" in diameter, 3 ft. long
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Time: 24 days @ $40.00 rental per day = $960.00
(this includes 4 days moving in and out time from Idaho Falls, Idaho).

Truck rental : one ½ton pickup for service to bulldozer and test pits, use in service to camp, and hauling samples to assay office Helena or Butte, Montana.
Time: 6 months @ $150.00 per month = $900.00

Summation 23 (f)

Bulldozer rental - - - - - - - - -	$2400.00
Shaft equipment rental - - - - - -	1050.00
Auger drill and equipment rental - - -	960.00
Access roads (bulldozer, as above) - - -	1500.00
Pickup truck rental - - - - - -	900.00
	$6810.00

23 (g)
None

23 (h)
Engineering equipment, paper, notebooks, etc. $45.00

23 (i)
Professional assay office service to separate the scheelite and monazite minerals from the sample concentrates taken on the project:
140 samples @ $5.00 each = $700.00

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The time schedule for this project calls for seven months for completion, starting in June, through November, and one additional month for calculation and report.

GENERAL INFORMATION

Accompanying the enclosed government forms MF-100 and MF-103, are the following: one engineer's report, one power report (exhibit A), and one hardrock sample of scheelite (calcium tungstate), (exhibit B). The engineer's report as written was for the purpose of interesting a dredging company in the production of placer gold, placer tungsten and monazite sand--the tungsten and monazite being by-products. This report is being submitted as it was written, which gives the basic economic value as gold value. Due to a fixed price of gold, and rising production costs, this property will not be worked for gold alone, and if not worked the tungsten values contained will not be made available for the present tungsten shortage.

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At your convenience, please return the engineer's report, the large power application report, and the tungsten sample to John B. Hopkins, 1039 North Warren, Helena, Montana.

John B. Hopkins, 1039 North Warren, Helena Mont.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 5 - 1951
LANDON F. STROBEL
Executive Secretary

Postmarked May 31-1951